

Seat No.: \_\_\_\_\_

Enrolment No. \_\_\_\_\_

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**BVOC- SEMESTER- IV EXAMINATION – SUMMER 2023**

**Subject Code:1140303**

**Date:28-06-2023**

**Subject Name: Metal Forming Processes**

**Time:10:30 AM TO 12:30 PM**

**Total Marks:50**

**Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	<b>Marks</b>
<b>Q.1</b> (a) State the advantages and limitations of the forging process.	<b>05</b>
(b) Explain the upsetting and drawing down operation with neat sketch.	<b>05</b>
<b>Q.2</b> (a) Enlist the various types of presses used in forging with neat sketches.	<b>05</b>
(b) Write the difference between hot rolling and cold rolling.	<b>05</b>
<b>OR</b>	
(b) Enlist different types of rolling mills and explain any one of them with a neat sketch.	<b>05</b>
<b>Q.3</b> (a) Differentiate between hot extrusion and cold extrusion.	<b>05</b>
(b) Explain tube extrusion process.	<b>05</b>
<b>OR</b>	
<b>Q.3</b> (a) Differentiate between forward extrusion and backward extrusion.	<b>05</b>
(b) Define Extrusion and state the advantages of extrusion process.	<b>05</b>
<b>Q.4</b> (a) Explain wire drawing with neat sketch.	<b>05</b>
(b) Explain spinning process with neat sketch.	<b>05</b>
<b>OR</b>	
<b>Q.4</b> (a) Explain cupping method with neat sketch.	<b>05</b>
(b) Define spinning and write the application of spinning process.	<b>05</b>
<b>Q.5</b> (a) Explain forged seamless pipe manufacturing process.	<b>05</b>
(b) Explain lap welding of pipe joint.	<b>05</b>
<b>OR</b>	
<b>Q.5</b> (a) Explain butt welding of pipe joint.	<b>05</b>
(b) State the method used to manufacture pipes.	<b>05</b>

\*\*\*\*\*